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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,463	01/04/2001	Akira Arai	9319A-000183	3626
7590 01/21/2004 Harness, Dickey & Pierce, P.L.C. P.O. Box 828 Bloomfield Hills, MI 48303			EXAMINER SHEEHAN, JOHN P	
			ART UNIT 1742	PAPER NUMBER

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/754,463	Applicant(s) ARAI ET AL.	
	Examiner John P. Sheehan	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 7-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 20, 2003 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 to 3, 5 and 7 to 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

I. The new lower limit of 400 kA/m for the intrinsic coercive force does not find support in the application as filed and therefore is considered to be new matter.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 to 3, 5 and 7 to 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Panchanathan (Panchanathan, US Patent No. 5,725,792, cited by the applicants in the IDS submitted January 4, 2001).

Panchanathan teaches a magnetic powder having a composition that overlaps the alloy composition recited in the instant claims (Panchanathan, column 1, lines 37 to 50). Panchanathan also teaches a process of making the disclosed magnetic powder that is similar to, if not the same as, the process disclosed in the instant application (Panchanathan, column 2, lines 1-21). Panchanathan teaches the presence of a hard and soft magnetic phase (column 1, lines 50 to 57). The composition of Panchanathan's Example N (column 3) is based on weight percent (column 1, lines 32 to 33) when converted to atomic percent (assuming that the atomic weight of the rare earth component is 144) has the composition:

Rare earth	7.6 atomic %
Boron	5.9 atomic %
Niobium	1.2 atomic % and
Iron	the balance.

Panchanathan discloses that the coercivity of Example N is 5.07 kOe or 399.5 kA/m.

These proportions of Panchanathan's Example N are completely encompassed by the instant claims.

The claims and Panchanathan differ in that Panchanathan is silent with respect to the soft phase being constrained through the surrounding hard magnetic phase and the irreversible susceptibility. Further, the coercive force of Panchanathan's Example N has a coercivity of 5.07 kOe or 399.5 kA/m while the minimum claimed coercivity of the instant claims is 400 kA/m.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the alloy taught by Panchanathan has a composition that overlaps the alloy composition recited in the instant claims and therefore is considered to establish a prima facie case of obviousness, *In re Malagari*, 182 USPQ 549 and MPEP 2144.05. Further, in view of the fact that the alloy taught by Panchanathan is made by a process which is similar to, if not the same as, applicants' process of making the instantly claimed alloy, the alloy taught by the reference would be expected to possess all the same properties as recited in the instant claims, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' *In re Spada*, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977)." see MPEP2112.01.

Regarding the coercivity, it is the Examiner's position that the difference between the coercivity of 399.5 kA/m for Panchanathan's Example N and applicants' claimed minimum value of 400 kA/m amounts to a difference of 0.125 %  $((400-399.5/400) \times 100 = 0.125\%)$ . This difference is so small as to be of no patentable significance.

### ***Response to Arguments***

1. Applicant's arguments filed October 20, 2003 have been fully considered but they are not persuasive.

Applicants' arguments regarding the coercivity of the instant claims and Panchanathan's Example N have been addressed above in the Examiner's new statement of the rejection.

Applicants' argument that the instant claims now recite a powder particle size of 0.5 to 150 microns whereas Panchanathan teaches a powder particle size of 200 microns is not persuasive. The powder particle size of 200 microns disclosed by Panchanathan is Panchanathan's preferred powder particle size (column 2, lines 15 and 16). The teachings of a reference are not limited to merely that which is set forth in the examples or the disclosed preferred embodiments. Instead "[a] reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art", MPEP 2123. Except for the statement that a powder particle of 200 microns is preferred, Panchanathan is silent with respect to the powder particle size. In view of this, and the fact that a reference is not limited to its disclosed preferred embodiments it is the Examiner's position that Panchanathan is not limited to any particular powder size


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but rather encompasses any powder particle size including a particle size of 0.5 to 150 microns as recited in applicants' claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

  
John P. Sheehan  
Primary Examiner  
Art Unit 1742

jps